

ABSTRACT:

A Schottky barrier diode and process of making is disclosed. The process forms a metal contact pattern in masked areas on a silicon carbide wafer. A preferred embodiment includes an insulating layer that is etched in the windows of the mask. An inert edge termination is implanted into the wafer beneath the oxide layer and adjacent the metal contacts to improve reliability. A further oxide layer may be added to improve surface resistance to physical damage.